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**Notes:**

1. Untranslatable words are replaced with asterisks (\*\*\*).
2. Texts in the figures are not translated and shown as it is.

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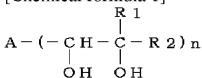
Dictionary: Last updated 06/17/2009 / Priority: 1. Chemistry / 2. Natural sciences / 3. Technical term

## FULL CONTENTS

### [Claim(s)]

[Claim 1](A) an average degree of polymerization -- three -- more than -- polyglycerin -- a carbon number -- eight - 22 -- saturation -- or -- unsaturated -- fatty acid -- from -- choosing -- having had -- one -- a sort -- or -- two -- a sort -- more than -- fatty acid -- ester -- it is -- and -- HLB -- 8.0 -- more than -- it is -- polyglyceryl fatty acid ester -- (-- B --) -- a general formula (1) --

[Chemical formula 1]



(The inside A of a formula is an alkyl group or a branched alkyl group of a hydrogen atom and the carbon numbers 1-20, and) [ the inside ] [ maltitol ] [ a residue except n hydroxyl groups, R<sub>1</sub>, and R<sub>2</sub> ] n shows an integer of 1-3. It is a charge of cleansing cream washing containing maltitol hydroxy aliphatic series ether and/or an alkyl glucoside system surface active agent with which it is expressed, A charge of cleansing cream washing whose loadings of 1.0 to 25.0 weight % and said component (B) loadings of said component (A) are 0.5 to 15.0 weight %.

### [Detailed Description of the Invention]

[0001]

[Industrial Application]The familiarity of this invention by the charge of cleansing cream washing with transparent appearance and good temperature stability which used polyglyceryl fatty acid ester, especially a makeup cosmetic is good, and it is suitable also for the hard makeup. When water is touched, in order to form an O/W emulsion in an instant, it excels also in water washability, and after use is related with the charge of cleansing cream washing without a feeling of a bottom oil which is the clean feeling of use.

[0002]

[Description of the Prior Art]Polyglyceryl fatty acid ester useful as a surface active agent of drugs, cosmetics, and food is obtained by esterifying fatty acid and polyglycerin. Although the polyglycerin of

a mother nucleus is obtained by condensation of glycerol, or the reaction of glycerol and glycidol, it is generally based on condensation of glycerol in many cases. Thus, since polyglyceryl fatty acid ester is using glycerol as the starting material, a skin stimulus is low and the field of safety is a good surface active agent. The cases where polyglyceryl fatty acid ester is used from this in order to improve safety more are increasing in number.

[0003] Although the cleansing cream oil which is one of the charges of washing till before was the special goods only for a hard makeup, [ oil ] They are goods in which it is sold for a person broad from a light makeup to a hard makeup these days, and the quantity sold is extended from the merit of the usability (cleansing cream ability, simple nature, etc.), and consumers' trend nature. The type to flush is in use and principal components are good oil of familiarity by makeup, and a surface active agent for washing away. In order to make an O/W emulsion form at the time of a washout, the nonrandom assortment of a surface active agent is a point of this product. Now, most surface active agents currently used are nonionic surface active agents which have a polyoxyethylene chain, and it had a problem at safety. Although examined from that by polyglyceryl fatty acid ester with high safety, since the function which forms an O/W emulsion in an instant was scarce when the transparency of appearance is bad or touches water required as a function, there were problems, like there is smeariness by the feeling of a bottom oil after use.

[0004]

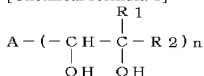
[Problem to be solved by the invention] Therefore, the purpose of this invention has transparent appearance using polyglyceryl fatty acid ester with high safety, and its familiarity by the charge of cleansing cream washing with good temperature stability, especially a makeup cosmetic is good, When it is suitable also for the hard makeup and water is touched, in order to form an O/W emulsion in an instant, it excels also in water washability, and after use is aimed at obtaining the charge of cleansing cream washing without a feeling of a bottom oil which is the clean feeling of use.

[0005]

[Means for Solving the Problem] In order that this invention person may attain the above-mentioned technical problem, as a result of inquiring wholeheartedly, specific polyglyceryl fatty acid ester, A charge of cleansing cream washing containing maltitol hydroxy aliphatic series ether and/or an alkyl glucoside system surface active agent finds out that the above-mentioned technical problem can be solved, and came to complete this invention.

[0006] Namely, polyglyceryl fatty acid ester whose this invention is ester of with a (A) average degree of polymerization [ of three or more ] polyglycerin, and one sort or two sorts or more of fatty acid chosen from fatty acid saturation of the carbon numbers 8-22, or unsaturated and whose HLB is 8.0 or more and the (B) general formula (1)

[Chemical formula 1]



(The inside A of a formula is the alkyl group or branched alkyl group of a hydrogen atom and the carbon numbers 1-20, and) [ the inside ] [ maltitol ] [ the residue except n hydroxyl groups, R<sub>1</sub>, and R<sub>2</sub> ] n

shows the integer of 1-3. It is a charge of cleansing cream washing containing the maltitol hydroxy aliphatic series ether and/or the alkyl glucoside system surface active agent with which it is expressed,

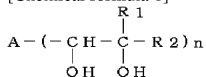
The loadings of said component (A) are related with the charge of cleansing cream washing whose loadings of 1.0 to 25.0 weight % and said component (B) are 0.5 to 15.0 weight %.

[0007] Hereafter, this invention is explained in detail. The polyglyceryl fatty acid ester used by this invention is ester of with an average degree of polymerization [ of three or more ] polyglycerin, and one sort or two sorts or more of fatty acid chosen from fatty acid the saturation of the carbon numbers 8-22, or unsaturated, and HLB is 8.0 or more polyglyceryl fatty acid ester. The fatty acid which constitutes polyglyceryl fatty acid ester may be any of a straight chain and fatty acid of branching. [ as such polyglyceryl fatty acid ester ] Ester of the polyglycerin of the degrees of polymerization 3-10, and the higher fatty acid of the carbon numbers 8-22, For example, tetramonolaurate glyceryl, hexamonolaurate glyceryl, Monolauric acid decaglyceryl, JIRAURIN acid decaglyceryl, hexamonomyrystate glyceryl, Monomyristic acid decaglyceryl, Jimi Rith Ching acid decaglyceryl, Monopalmitic acid decaglyceryl, monostearin acid decaglyceryl, Distearic acid decaglyceryl, monooleic acid hexa glyceryl, monooleic acid decaglyceryl, Gio Reign acid decaglyceryl, mono- isostearic acid decaglyceryl, JIISO stearic acid decaglyceryl, etc. are mentioned, and these one sort or two sorts or more are used. Eleven or more polyglyceryl fatty acid ester has preferred HLB especially in these. For example, they are monooleic acid hexa glyceryl, JIISO stearic acid decaglyceryl, etc. It is also possible to use together suitably less than 8.0 polyglyceryl fatty acid ester and the polyglyceryl fatty acid ester exceeding HLB8.0 at a rate used as 8.0 or more HLB.

[0008] The above-mentioned polyglyceryl fatty acid ester is preferably used for the charge of cleansing cream washing of this invention 5.0 to 15.0 weight % 1.0 to 25.0 weight %. In less than 1.0 weight %, it becomes difficult to form an O/W emulsion in an instant, it cannot obtain the target performance, and the charge of cleansing cream washing which the charge of cleansing cream washing was not obtained, and was used exceeding 25.0 weight % does not have it on use, when water is touched. [ preferred ]

[0009] The maltitol hydroxy aliphatic series ether used by this invention is denoted by a following general formula (1).

[Chemical formula 1]



(The inside A of a formula is the alkyl group or branched alkyl group of a hydrogen atom and the carbon numbers 1-20, and) [ the inside ] [ maltitol ] [ the residue except n hydroxyl groups, R<sub>1</sub>, and R<sub>2</sub> ] n

shows the integer of 1-3., [ in the above-mentioned general formula (1) ] [ as the alkyl group of C<sub>1</sub>

which is examples other than the hydrogen atom of R<sub>1</sub> and R<sub>2</sub> - C<sub>20</sub>, or an alkyl group of branching ]

For example, a methyl group, an ethyl group, an isopropyl group, a pentyl group, a hexyl group, a heptyl group, an octyl group, a lauryl group, a milli still group, a palmityl group, a stearyl group, a 2-ethylhexyl group, an isostearyl group, etc. are mentioned, and these kinds or two sorts or more are used. Especially the thing of a lauryl group and a milli still group is preferred in these.

[0010] [ as an alkyl glucoside system surface active agent used by this invention ] Alkyl glucoside, such as octylglucoside, nonylglucoside, decylglucoside, dodecylglucoside, lauryl glucoside, MIRISU chill glucoside, and palmityl glucoside, is mentioned, and these kinds or two sorts or more are used. In these, especially lauryl glucoside is preferred.

[0011]The above-mentioned maltitol hydroxy aliphatic series ether and/or an alkyl glucoside system surface active agent are preferably used for the charge of cleansing cream washing of this invention 1.0 to 6.0weight % 0.5 to 15.0weight %. Since it becomes difficult to form an O/W emulsion in an instant and a feeling of a bottom oil comes even out of after use strongly when water is touched, the cleansing cream cosmetic prepared at less than 0.5 weight % cannot obtain the target performance. When it is used exceeding 15.0 weight %, appearance becomes cloudy at low temperature, or it thickens too much, flowability is lost, and it is not desirable on use.

[0012][ as oil blended with the charge of cleansing cream washing of this invention ] There is no limitation in particular and For example, hydrocarbons, such as liquid paraffin and squalane, Ester, such as myristic acid octyldodecyl and isononyl isononanoate and isopropyl myristate, Triglyceride, such as bird octanoic acid glyceryl and bird (capryl lactam capric acid) glyceryl, Higher alcohols, such as silicone, such as vegetable oils, such as olive oil, jojoba oil, Oenotherae Biennis oil, and palm oil, dimethylpolysiloxane, methylphenyl polysiloxane, and an annular methylpolysiloxane, and octyldodecanol, etc. are mentioned, and these kinds or two sorts or more are used.

[0013]The component used for the usual charge of cleansing cream washing in the range in which the charge of cleansing cream washing of this invention does not spoil an effect of the invention, For example, polyols, such as glycerol and diglycerol, sugar-alcohol, vegetable oils, various vitamins, an amino acid, a crude drug, an antiphlogistic, a cell activator, a pigment, antiseptics, perfume, etc. can be blended suitably.

[0014]The charge of cleansing cream washing of this invention can be manufactured in accordance with a conventional method, For example, it can obtain by carrying out the addition dissolution of the oil gradually under churning of the surfactant phase which carried out the mixture solution of polyglyceryl fatty acid ester, maltitol hydroxy aliphatic series ether, and/or the alkyl glucoside system surface active agent.

[0015]  
[Working example]Although an embodiment is given to below and this invention is concretely explained to it, this invention is not limited to these.

[0016]The constituent of the one to Embodiments 1-5 and comparative example 5 table 1 and two descriptions was prepared, and the following valuation methods estimated. The result is shown in Tables 1 and 2.

[0017](Valuation method)

1) The state of the charge of cleansing cream washing prepared by the transparency embodiment and the comparative example was observed visually, and it evaluated based on the following valuation bases.  
O : -- O: which presents very good transparency -- \*\*: which presents good transparency, [ 20 feeling of 2 use healthy female panelists who present x:nebula which becomes muddy for a while ] [ bare skin ]  
[ and ] After desiccation, after performing cleansing cream operation for about 20 seconds using 1.0 g of charges of cleansing cream washing which prepared by spreading to the face part and prepared the existing waterproof oily foundation by the embodiment and the comparative example 30 minutes afterward, it washed away with water. Each item of the "ease of getting used with a makeup" in that case "massage nature", the "ease of rinsing by water", "wash going up being admiration in the least", and the "makeup omission effect" was graded as full marks, and it evaluated in accordance with the following bases from the average mark.

(Valuation basis)

criticism Value Common \*\* Point Judgment good Good : 75 or more points : O -- slightly good : 50 or more points - less than 75 points : O -- slightly poor : 25 or more points - less than 50 points : \*\* -- un--- Right : Less than 25 points : x3 stability embodiment. The state after one-month neglect was visually observed to the thermostat (0 \*\* and 50 \*\*), and the charge of cleansing cream washing prepared by the comparative example was evaluated based on the following valuation bases.

(Valuation basis)

O : change-of-state-less x : changes of state, such as nebula and separation, occur. [0018]

[Table 1]

表1

(重量%)

| 実 施 例                            |             | 1    | 2    | 3    | 4    | 5    |
|----------------------------------|-------------|------|------|------|------|------|
| モノイステアリン酸テトラグリセリル (HLB. 8.2)     |             | —    | —    | —    | —    | 15.0 |
| モノオレイン酸ヘキサグリセリル (HLB11.6)        |             | 1.0  | 25.0 | 15.0 | —    | —    |
| ジイソステアリン酸デカグリセリル (HLB.11.8)      |             | —    | —    | —    | 15.0 | —    |
| 流動パラフィン (70cs)                   |             | 74.0 | 73.5 | 75.0 | 81.0 | 80.0 |
| ヒマワリ油                            |             | —    | —    | 3.0  | —    | —    |
| トリ(カファリル・カフリン)酸トリセリル             |             | —    | —    | 3.0  | —    | —    |
| ラウリルグルコシド(40%)                   |             | —    | 1.5  | 3.0  | —    | 5.0  |
| マルチオールヒドロキシアシルキル(12.14)エーテル(60%) |             | 25.0 | —    | 1.0  | 4.0  | —    |
| 透明性                              |             | ○    | ○    | ◎    | ◎    | ◎    |
| 使<br>用<br>感                      | マッサージ性      | ○    | ○    | ◎    | ◎    | ◎    |
|                                  | メークとの馴染み易さ  | ○    | ○    | ◎    | ◎    | ◎    |
|                                  | 水による濯ぎ易さ    | ◎    | ◎    | ◎    | ○    | ○    |
|                                  | 洗い上がりのさっぱり感 | ◎    | ◎    | ◎    | ○    | ○    |
|                                  | メーク落ち効果     | ◎    | ◎    | ◎    | ◎    | ◎    |
| 安定性                              | 50°C × 1 ヶ月 | ○    | ○    | ○    | ○    | ○    |
|                                  | 0°C × 1 ヶ月  | ○    | ○    | ○    | ○    | ○    |

[0019]

[Table 2]

表2

(重量%)

| 比較例                             |             | 1    | 2    | 3    | 4    | 5    |
|---------------------------------|-------------|------|------|------|------|------|
| モノオウリン酸トリグリセリル (HLB 6.8)        |             | —    | —    | 15.0 | —    | —    |
| モノオレイン酸ヘキサグリセリル (HLB 11.6)      |             | —    | 25.0 | —    | 1.0  | 30.0 |
| 流動パラフィン (70cs)                  |             | 75.0 | 75.0 | 80.0 | 69.0 | 69.0 |
| ラウリルグルコシド(40%)                  |             | —    | —    | 5.0  | —    | —    |
| マルチオールヒドロキシアルキル(12,14)エーテル(60%) |             | 25.0 | —    | —    | 30.0 | 1.0  |
| 透明性                             |             | ×    | ○    | ○    | △    | △    |
| 使用感                             | マッサージ性      | ×    | △    | ◎    | ×    | ×    |
|                                 | メイクとの馴染み易さ  | ×    | △    | ◎    | ×    | ×    |
|                                 | 水による濡れ易さ    | ×    | ×    | △    | ×    | ×    |
|                                 | 洗い上がりのさっぱり感 | ×    | ×    | ×    | ×    | ×    |
|                                 | メイク落ち効果     | ◎    | ◎    | ◎    | ○    | ○    |
| 安定性                             | 60°C×1ヵ月    | ○    | ○    | ×    | ○    | ○    |
|                                 | 0°C×1ヵ月     | ×    | ×    | ×    | ×    | ×    |

[0020]The charge of cleansing cream washing shown in Embodiments 1-5 was enough about all the evaluation criteria. On the other hand, it was an evaluation result with one item insufficient about what was shown in the comparative examples 1-5 of the evaluation criteria.

[0021]

[Effect of the Invention]The charge of cleansing cream washing of this invention has the good familiarity by the charge of cleansing cream washing with transparent appearance and good temperature stability which used polyglyceryl fatty acid ester, especially a makeup cosmetic, and is suitable also for the hard makeup.

When water is touched, in order to form an O/W emulsion in an instant, it excels also in water washability, and after use is a charge of cleansing cream washing which is the clean feeling of use without a feeling of a bottom oil.

[Translation done.]